UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

REALTIME ADAPTIVE STREAMING	ŕ
LLC,	

Case No. 6:17-cv-00591-JRG

Plaintiff,

V.

CISCO SYSTEMS, INC.,

Defendant.

PLAINTIFF REALTIME ADAPTIVE STREAMING LLC'S SUR-REPLY IN OPPOSITION TO CISCO'S MOTION TO DISMISS (DKT. NO. 39)

TABLE OF CONTENTS

		Page	<u>(S)</u>
I.	Intro	oduction	1
II.	Cisc	co Cannot Prove The Fallon Claims Are Abstract Under Alice Step 1.	1
	A.	The claims recite specific technological solutions to technological problems and, therefore, are not abstract as a matter of law.	1
	B.	Cisco's demonstrably false assertions about the facts and the law do not help its motion.	2
III.		co Also Cannot Show Patent Ineligibility Because The Intrinsic Record Confirms That Claims Recite Unconventional Solutions To Technological Problems	
	A.	A section 101 analysis under <i>Alice</i> step 2 involves questions of fact	5
	B.	The intrinsic record confirms that the claimed inventions involve unconventional solutions under step 2.	6
IV.		co's Attempt To Shift Its Burden Does Not Mask Its Fatal Failure To Analyze Each m Separately.	8
V.		ltime's Allegations Regarding the '462 and '298 Patents Easily Exceed Pleading adards, under <i>Stragent</i> or Any Other Case.	9
VI.	Cisc	co's Arguments On Indirect Infringement Also Fail.	10

I. Introduction

Rather than directly addressing the relevant questions for this Court, Cisco's Reply makes repeated mischaracterizations about the facts, the law, and Realtime's arguments. The Fallon patents are patent eligible under \$101 because the claims provide particularized technological solutions to technological problems. Cisco's arguments to the contrary continues to ignore key elements of the claims, including "asymmetric" compressors, using multiple compressors, and selecting compressors based "throughput," among others. Cisco's arguments are also premised on its dramatic generalization of \$101 caselaw—that all compression patents are ineligible. That is false, as this Court already recognized in its \$101 rulings as to other Realtime patents. Cisco also glosses over the patents' specifications which confirm unconventional nature of the claims. Under recent Federal Circuit opinions of *Berkheimer* and *Aatrix Software*, these intrinsic record compels denial of Cisco's motion to dismiss under \$101.

Cisco's arguments as to the '462 and '298 patents under *Iqbal/Twombly* fail as well. In Reply, all that Cisco offers is its false accusation about Realtime's arguments and mischaracterizations of the *Stragent* case. A review of Realtime's FAC shows that the element-by-element allegations are more than sufficient, under *Stragent* or any other cases.

II. Cisco Cannot Prove The Fallon Claims Are Abstract Under Alice Step 1.

A. The claims recite specific technological solutions to technological problems and, therefore, are not abstract as a matter of law.

Although not its burden to carry, Realtime has demonstrated that the Fallon patent claims are directed to digital-data compression solutions to overcome technological problems specific to the field of digital-data compression. For example, the Fallon patents recite claim limitations that reflect technical solutions comprising combinations of: (1) "asymmetric" compressors, (2) two or more compressors, (3) selecting a compressor based on the "throughput of a communication channel," and/or (4) digital-data "access profiles." And to be sure, the problems that the claimed

¹ See, e.g., '535 patent cl. 1 ("plurality of access profiles," "asymmetric data compression") & cl. 15 ("asymmetric compressors," "plurality of compressors"); '477 patent cl. 1 ("plurality of different asymmetric data compression," selecting encoder based on "throughput of a communications channel"); '907 patent cl. 1 ("asymmetric data compression," selecting compression based on "throughput"); '442 patent cl. 1 ("plurality of compression," selecting

solutions address are also technological—as opposed to human—problems, including, "a compromise between efficient data storage, access speed, and addressable data space," "[d]ata storage and retrieval bandwidth limitations," "access delays," issues relating to lack of visibility into "algorithmic efficiency," and "[c]ompeting requirements of data access bandwidth, data reliability/redundancy, and efficiency of storage space." *E.g.*, '535 patent at 1:61-62, 2:58-61, 4:57-60, 5:5-10, 6:31-53, 7:41-45.

In short, the Fallon patent claims recite specific and particularized technological solutions—improving the capability of a computer system to store or transfer digital data more efficiently in flexible ways—to technological problems. Under controlling law, these claims are not abstract. *E.g., See, e.g., Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) (software database patent eligible because it is "directed to an improvement in the functioning of a computer."); *DDR v. Hotels.com LP*, 773 F.3d 1245 (Fed. Cir. 2014) (e-commerce patent eligible because it is a "concept for resolving [a] particular Internet-centric problem"); *Core Wireless Licensing v. LG Elecs., Inc.*, --- F.3d ---, 2018 WL 542672 (Fed. Cir. Jan. 25, 2018) (user-interface patent eligible because the "particular manner of summarizing and presenting information in electronic devices" was "an improvement in the functioning of computers").

B. Cisco's demonstrably false assertions about the facts and the law do not help its motion.

In its first distraction, Cisco argues that Realtime's Opposition was "almost exclusively" on the Fallon patent specifications (Reply at 2) and that "Realtime never identifies any claim reciting a new type of compression technology" (*id.* at 3). That is demonstrably untrue and ignores large swaths of Realtime's Opposition. Realtime identified specific combinations of claim elements—including asymmetric compressors, "plurality" of compressors, selecting compressor based on parameter / "throughput of a communication channel," and access profile—in explaining why the claims are not abstract throughout the Opposition. For instance, the claim term "asymmetric" alone is mentioned at least on pages 1, 3, 4, 8, 10, 16, 17, 18, 20, and 21 of

compression based on "throughput"), cl. 8 ("plurality of compression," selecting compression based on "throughput," "asymmetric" compression).

the Opposition. Cisco's assertion that problems such as "storage size limitations, random access time, and disk fragmentation" are "unrelated to the claims" (Mot. at 1, 2) is pure, unsupported attorney argument. It is also contradicted by the specification. For example, after describing problems in the prior art, the specification states that the problems "are solved with the present invention," and goes on to describe specific claim elements, including, e.g., "plurality of compression," "asymmetric" compression, selecting compression based on "throughput," among others. '535 patent at 7:46-8:54. The patents provide further details on the solutions, including that using "asymmetric" compression in specific situations would "increase ... overall system performance" and "effectively increas[e] the storage capacity." *E.g., id.* at 12:14-35.²

There is nothing wrong with the fact that Realtime *also* cited the specification in discussing these recited claim elements. The Federal Circuit recently confirmed that "sources properly considered on a motion to dismiss" include "the complaint, the patent, and materials subject to judicial notice." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, -- F.3d --, 2018 WL 843288, *5 (Fed. Cir. Feb. 14, 2018). Indeed, "[t]he improvements in the specification, to the extent they are captured in the claims, create a factual dispute regarding whether the invention describes well-understood, routine, and conventional activities." *Berkheimer v. HP Inc.*, -- F.3d --, 2018 WL 774096, *6 (Fed. Cir. Feb. 8, 2018).

Instead of dealing with these relevant parts of the patents, Cisco continues to mischaracterize the claims and Realtime's positions by arguing that its "formulation [of the claims] is virtually identical to Cisco's description" (Reply at 3). That is demonstrably false, as Cisco continues to omit key aspects of the claims, including use of asymmetric compressors, two or more compressors, and/or access profile. *See id*.

Instead of accurately capturing key clam elements, Cisco just ignores them. For example,

² Cisco's argument about "file allocation tables" (Reply at 3) is a strawman. Realtime's Opposition nowhere mentions "file allocation tables." But in any event, the improved compression system claimed in the Fallon patents alleviate the issues relating to file allocation tables by providing more efficient "data storage" and "access speed," which the patents explain affect file allocation tables. See '535 patent at 6:39-42.

Cisco argues that "claims do not require using two compressors" and points to '535 claim 15. Reviewing claim 15 of the '535 patent shows that Cisco is wrong—claim 15 expressly recites "plurality of compressors." '535 patent cl. 15. And in another distraction, Cisco's argument that "the patent admits" this concept was known is also incorrect. The Fallon patents merely incorporated by reference other Realtime patents invented by the same inventor (James Fallon) and developed around the same time that taught use of two compressors. '535 patent at 5:33-55. That is not an admission that using two compressors was "well-known." In any event, whether one recited claim element was known does not answer the key question regarding whether the patented claims *as a whole* are directed to a technical solution to a technical problem.

In a flawed attempt to cast the patented computer-system improvement as abstract ideas, Cisco also argues that there are digital data that are purportedly human-recognizable. *See* Reply at 3-4. But that pure attorney argument mischaracterizes the specification and is contrary to common sense. The specification merely states there are some digital data ("symbolic digital data") that *represent* human readable data such as a letter or a drawing. '535 patent at 2:18-20. That statement is about *representing* human readable data, not about digital data being human readable. Indeed, it is common sense that digital data—i.e., 1s and 0s—are not easily recognizable to humans in its native form, as confirmed by the patents. '535 patent at 28-30. At a bare minimum, this must be given such plausible interpretation at the pleadings stage *E.g.*, *JSDQ Mesh Techs. LLC v. Fluidmesh Networks*, *LLC*, 2016 WL 4639140, at *1 (D. Del. Sept. 6, 2016) 9 ("At the motion to dismiss stage a [] claim can be found . . . ineligible . . . if the only plausible reading of the patent must be that there is clear and convincing evidence of ineligibility.")

Unsatisfied with recasting the patents as something they are not, Cisco then makes a sweeping mischaracterization of the law. It argues that *all* data compression patents are categorically ineligible in view of *RecogniCorp*. *See* Reply at 2.³ *RecogniCorp* obviously did not

³ In yet another bizarre falsehood, Cisco also asserts that "Realtime attempt[ed] to avoid *RecogniCorp*" (Reply at 1). That is another demonstrably false accusation. Realtime addressed *RecogniCorp* on the very first page of its Opposition—and again on pages 12-15.

so hold. In fact, the claim at issue in *RecogniCorp* was about "creating [an] image" using mathematical formula ("multiplication operation"). *RecogniCorp*, *LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1324 (Fed. Cir. 2017). And the *RecogniCorp* court expressly held that "the invention can be practiced verbally." *Id.* at 1328. Thus, unlike the Fallon patents claims at issue here, RecogniCorp's patent was not a technological solution to technological problems and was not a particularized or improved method of digital-data compression. In short, the Federal Circuit's decision in *RecogniCorp* says nothing about the correct analysis of the eligibility of the *digital-data compression patents in this case*. In fact, in the single instance in which the Federal Circuit has made any statements on digital-data compression, those statements cut against the very core of Cisco's arguments. In *DDR*, after analyzing the claimed e-commerce inventions, the court held that although "the [asserted] claims do not recite an invention as technologically complex as an improved, particularized method of **digital data compression**," they were nonetheless patent-eligible. *See DDR Holdings LLC*, 773 F.3d at 1259. And this Court acknowledged as much when it confirmed the eligibility of other Realtime digital-data compression patents that are incorporated by reference in the asserted patents. *See* Opp. at 4-5, 11-13, and Ex. 1-3.

III. Cisco Also Cannot Show Patent Ineligibility Because The Intrinsic Record Confirms That The Claims Recite Unconventional Solutions To Technological Problems.

A. A section 101 analysis under *Alice* step 2 involves questions of fact.

The Federal Circuit in *Berkheimer* confirmed that any *Alice* step 2 analysis involves underlying factual questions. *Berkheimer*, 2018 WL 774096, *5-6. Specifically, the court clarified that "[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is *a question of fact* ... [which] must be proven by *clear and convincing evidence*." *Id*. After reviewing the intrinsic record in the case, the court held that "[t]he improvements in the specification, to the extent they are captured in the claims, create a factual dispute regarding whether the invention describes well-understood, routine, and conventional activities." *Id*. Accordingly, the district court there committed legal error in granting summary judgment despite this factual dispute. *Id*.

More recently, in *Aatrix Software*, the Federal Circuit applied these principles to vacate a district court's ruling of patent-ineligibility pursuant to a motion under Rule 12(b)(6). *Aatrix Software, Inc. v. Green Shades Software, Inc.*, -- F.3d --, 2018 WL 843288, *6 (Fed. Cir. Feb. 14, 2018). Buttressing its precedent in *Berkheimer*, the court held that "patent eligibility can be determined at the Rule 12(b)(6) stage ... *only when* there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Id.* at *2. Moreover, the court explained that at that stage, "sources properly considered on a motion to dismiss [include] the complaint, the patent, and materials subject to judicial notice." *Id.* at *5. The court reviewed these sources and held that the district court erred because plaintiff's "allegations at a minimum raise factual disputes underlying the §101 analysis, such as whether the claim term 'data file' constitutes an inventive concept, alone or in combination with other elements." *Id.* at *4-5.

The *Aatrix* court did not end its analysis there. In the first decision of its kind in the §101 context, the court applied well established Rule 12 principles and also found that the district court abused its discretion in denying leave to amend complaint. In remanding, the court then expressly allowed the amended complaint, holding that, "[v]iewed in favor of [plaintiff], as the district court must at the Rule 12(b)(6) stage, the complaint alleges that the claimed combination improves the functioning and operation of the computer itself. These allegations, if accepted as true, contradict the district court's conclusion that the claimed combination was conventional or routine." *Id.* at *4; *id.* at *3 ("[A]t that stage there certainly were allegations of fact that, if [plaintiff's] position were accepted, would preclude the dismissal.").

B. The intrinsic record confirms that the claimed inventions involve unconventional solutions under step 2.

The claims of the four asserted Fallon patents recite unconventional technological solutions, namely, the combination of (1) asymmetric compressors, (2) two or more compressors, (3) selecting compressor based on parameter such as throughput of a communication channel, and/or (4) access profile. *See supra* fn.1.

Per the intrinsic record, the unconventional solutions recited in the claims solve the

problems in the art at the time of the invention. Those problems include, to name a few:

- "[D]ata storage and retrieval bandwidth limitations" '535 patent at 1:61-62;
- "[M]agnetic disk mass storage devices currently employed in a variety of [] computing applications suffer from significant seek-time access delays along with profound read/write data rate limitations." *Id.* at 2:58-61; and
- "[T]he compression ratio to encoding and decoding speed achieved." *Id.* at 4:57-60. In applying compression, the patentees further recognized that:
 - "What is not apparent from these algorithms, that is also one major deficiency within the current art, is knowledge of their algorithmic efficiency." *Id.* at 5:5-10;
 - "[A] compromise between efficient data storage, access speed, and addressable data space." *Id.* at 6:39-42; and
 - "Competing requirements of data access bandwidth, data reliability/redundancy, and efficiency of storage space are encountered." *Id.* at 7:41-45.

After describing these technological problems, the patents confirm that "[t]hese and other limitations within the current art are solved with the present invention." *Id.* at 7:46-47. And the remainder of the patents make clear that the claims include unconventional elements.

For example, the inventors of the Fallon patents recognized that "a system and method that would provide dynamic modification of compression system parameters so as to provide an optimal balance between execution speed of the algorithm (compression rate) and the resulting compression ratio, is highly desirable." *Id.* at 1:56-60; *see also id.* at 9:55-59. In other words, this dynamically modified compression system—which can use two or more compressors and selects compression based on "*throughput of a communication channel*"—was unconventional.

As another example, the inventors of the Fallon patents also recognized the unconventional effect of using asymmetrical compression⁴ in specific situations:

"[W]ith data sets falling within Access Profile 1 ... it is preferable to utilize an asymmetrical algorithm . . . Further, the compression ratio obtained using the asymmetrical algorithm would likely be higher than that obtained using a symmetrical algorithm (thus effectively increasing the storage capacity of the storage device)." Id. at 12:14-25; see also id. at 12:26-35.

In short, the intrinsic record actually supports only one conclusion: that the claimed

7

⁴ "An asymmetrical data compression algorithm is ... one in which the execution time for the compression and decompression routines differ significantly." '535 patent at 9:63-66.

solutions improve the functioning of a computer—increasing the capacity of a computer system to store or transfer data more efficiently in a flexible way. But there is more. The novel and unconventional aspects are further confirmed by the intrinsic patent file histories. For example, in granting patent issuance, the USPTO examiner stated that "the claimed subject matter in claims is allowable because the arts of record fail to teach or fairly suggest in combinations" recited in the claims, including, e.g., "asymmetric compressors," "plurality of compressors," "compression routing ... depend[] on the throughput," and/or "access profile." Ex. A ('535 FH, Notice of Allowability, July 22, 2014) at 6-8.⁵ This is even more compelling because "setting forth of reasons for allowance is not mandatory on the examiner's part." MPEP §1302.14.

The intrinsic record confirms that the claims recite unconventional solutions. At the very least, they raise factual issues on these points. Applying *Berkheimer* and *Aatrix Software*, these factual issues preclude dismissal and, thus, Defendant's 12(b)(6) motion must be denied.

IV. <u>Cisco's Attempt To Shift Its Burden Does Not Mask Its Fatal Failure To Analyze Each Claim Separately.</u>

Having failed to make *any* showing on the vast majority of asserted claims, Cisco suggests that *Realtime* must show how each of its claims are actually different and distinct. That is plainly wrong. Each of the patent claim is presumed to reflect a distinct invention. *See Comair Rotron, Inc. v. Nippon Densan Corp.*, 49 F.3d 1535, 1539 (Fed. Cir. 1995). And in any event, the burden is on *Cisco* to prove—by clear and convincing evidence—that each of the 75 asserted claims of the Fallon patents are ineligible. Instead of making the required showing, Cisco merely states its preferred conclusion. But saying that all claims are "substantially similar" does not make it so. Claims unaddressed by Cisco include numerous other elements, including, "fast decompress decoder," "arithmetic algorithm," "value related to a format or a syntax," "content-dependent data compression," "utilization of a buffer," among others. *E.g.*, '535 claims 1-6, 8-12, 14, 16, 17, 19, 21, 22, 24; '477 claims 2-29; '442 claims 2-6, 9-12, 14, 15; '907 claims 2-14.

⁵ Realtime respectfully requests the Court to take judicial notice of the file histories, as the facts are part of the public record not subject to any reasonable dispute. *See Aatrix*, 2018 WL 843288 at *5; Fed. R. Evid. 201(b).

V. <u>Realtime's Allegations Regarding the '462 and '298 Patents Easily Exceed Pleading Standards, under Stragent or Any Other Case.</u>

In its Reply, Cisco does not dispute that Realtime's FAC includes allegations—and even documentary proof from Cisco's own websites—that each of the relevant accused products utilize the H.265 standard. Nor could it. FAC devotes 10 full paragraphs on these allegations, and cites 7 different Cisco webpages. E.g., Dkt. No. 17 at ¶¶ 93-102. Critically, Cisco also does not dispute that Realtime's FAC provides element-by-element infringement allegations that Cisco's "Accused Instrumentalities" meet every limitation of one exemplary claim from the '462 and '298 patents. The allegations for the '462 patent alone span 31 paragraphs because they include Realtime's specific theories of infringement of each patent. E.g., Dkt. No. 17 at ¶¶ 93-102. This alone is sufficient to survive a motion to dismiss. Cellular Commc'ns Equip. LLC v. HTC Corp., 2016 WL 4204136, at *2 (E.D. Tex. Aug. 9, 2016). ("[A] patentee need only plead facts sufficient to place the alleged infringer on notice as to what he must defend.").

But Realtime's FAC even goes one step further. In addition to providing the specific infringement theories for each claim limitation, Realtime shows how Cisco's "Accused Instrumentalities" meet every limitation by providing *documentary* proof connecting specific portions of the H.265 standard to each claim limitation. *E.g.*, Dkt. No. 17 at ¶¶ 93-102. These proofs are from both H.265 Specifications *and* industry "reference software." *E.g.*, *id*.

Thus, Realtime's allegations plainly provide detailed allegations that *Cisco's "Accused Instrumentalities*" satisfy each claim limitation by practicing specific portions of the H.265 standard—and connect those portions of the standard to each limitation. Stragent—the single case on which Cisco relies—expressly endorses this approach to pleading and directly cuts against Cisco's entire argument. Specifically, the Court in Stragent held "since Stragent has adduced no facts suggesting that the claims 'cover every possible implementation' of [the Standard], Stragent must connect either the accused products to the asserted claims or the AUTOSTAR Standard to the asserted claims." Stragent LLC v. BMW of N. Am., LLC, 2017 WL 2821697, *5 (E.D. Tex. Mar. 3, 2017) (emphasis added). That is exactly what Realtime did.

Cisco has no answer for these critical aspects of the Court's analysis in *Stragent*. So it instead misstates Realtime's allegations by arguing that the FAC "cite[s] only to third-party documentation" and does "not make any allegation specific to Cisco at all." Reply at 8; *see also* Reply at 9 (arguing that Realtime fails to link Cisco's products to specific portions of the standard."). But that is demonstrably untrue. Not only did Realtime's FAC cite 7 different Cisco webpages (E.g., Dkt. No. 17 at ¶ 93-102), it also alleges, in detail, how Cisco's "Accused Instrumentalities" meet every limitation. The fact that Realtime did so by pointing to documentary proofs from both H.265 Specifications and industry "reference software" is irrelevant to Defendant's motion and, if anything, a fact that makes Realtime's FAC fall clearly under what is approved in *Stragent*. 2017 WL 2821697 at *5.

After sorting through the false accusations and mischaracterizations, Cisco's arguments can only boil down to its incorrect suggestion that Realtime provide its infringement theories and cite only Cisco documentation showing each element. But neither Stragent nor any other case requires that specific kind of proof. To the contrary, Stragent expressly rejects that such defendant-originating proof is required. In fact, it states that in the pleadings stage, "[t]he Court does not expect Plaintiff to present proof of any kind." Id. (emphasis added).

VI. Cisco's Arguments On Indirect Infringement Also Fail.

In Reply, Cisco does not dispute that Realtime's indirect infringement allegations are sufficient at least to the post-suit time frame. Cisco's attempt to have this Court carve up an indirect infringement claim by time frame (i.e., pre-suit and post-suit) should be rejected. For its part, Cisco fails to provide any legal authority for the Court to needlessly carve up the allegations in this futile way.

⁶ Instead of dealing with the critical aspects of *Stragent*, Cisco distracts from the issues by repeatedly (and aggressively) accusing Realtime of arguing that "*Stragent* is somehow bad law" and that "Judge Mitchell and Judge Schroeder both got it wrong." Reply at 7, 9. That accusation is false and, of course, Cisco fails to provide a single quote from Realtime's brief to support it. The accusation also is another distraction from the real issue: whether Realtime sufficiently pled its infringement allegations. Under *Stragent*, or any other case, it certainly did.

Respectfully submitted, Dated: February 20, 2018

By: /s/ C. Jay Chung

Marc A. Fenster (CA SBN 181067)

Email: mfenster@raklaw.com

Brian D. Ledahl (CA SBN 186579)

Email: bledahl@raklaw.com Reza Mirzaie (CA SBN 246953) Email: rmirzaie@raklaw.com Paul Kroeger (CA SBN 229074)

Email: pkroeger@raklaw.com C. Jay Chung (CA SBN 252794)

Email: jchung@raklaw.com

Philip X. Wang (CA SBN 262239)

Email: pwang@raklaw.com

RUSS AUGUST & KABAT

12424 Wilshire Boulevard, 12th Floor

Los Angeles, CA 90025 Telephone: 310/826-7474 Facsimile 310/826-6991

T. John Ward, Jr.

Texas State Bar No. 00794818

E-mail: jw@wsfirm.com Claire Abernathy Henry

Texas State Bar No. 24053063

E-mail: claire@wsfirm.com

Andrea Fair

State Bar No. 24078488

E-mail: Andrea@wsfirm.com Ward, Smith & Hill, PLLC

PO Box 1231

Longview, Texas 75606-1231 (903) 757-6400 (telephone)

(903) 757-2323 (facsimile)

Attorneys for Plaintiff REALTIME ADAPTIVE STREAMING LLC

CERTIFICATE OF SERVICE

I hereby certify that the foregoing document was served on all counsel of record via electronic service on February 20, 2018.

/s/ C. Jay Chung